ABSTRACT

A robot control apparatus capable of largely reducing a calculation amount to be capable of lowering a load of a CPU is provided. A control apparatus of a robot includes: a plurality of shafts interfering with each other; each of the shafts including a motor (8), (18), an arm (9), (19) coupled to the motor (8), (18) via a spring element such as a speed reducer and a motor position detector (10), (20) for detecting a position of the motor (8), (18); a position control unit (1), (11) and a speed control unit (2), (12) in order to operate each of the shafts in correspondence with an instruction for each of the plural shafts; an interference force calculating unit (7), (17) for calculating interference force which is exerted to another shaft from an instruction of the own shaft; a non-interference torque signal forming unit (6), (16) for forming a motor torque instruction signal by which the own shaft is operated in correspondence with the instruction also in such a case that interference force exerted from another shaft is present based upon the calculation value of the interference force exerted from another shaft, and the instruction of the own shaft; and a non-interference position signal producing unit (5), (15) for producing a motor position signal by which the own shaft is operated in correspondence with the instruction also in such a case that interference force executed from another shaft is present based upon the calculation value of the interference force exerted from another shaft, and the instruction of the own shaft.